

**METHODS AND APPARATUS
FOR CONTENT DELIVERY VIA APPLICATION
LEVEL MULTICAST WITH MINIMUM COMMUNICATION DELAY**

ABSTRACT

- 5 A method for constructing an overlay multicast tree to deliver data from a source to an identified group of nodes is provided in which a plurality of nodes are identified and mapped into multidimensional Euclidean space. A geometric region is constructed having a size that is the minimum size necessary to contain the source and all the nodes. Once constructed, a tree is created beginning at the source and including all of the nodes
10 within the geometric region.